CA Preschool Energy Efficiency Program

1.	Projected Program Budget	\$ 2,999,696
2.	Projected Program Impacts	
	MWh	3,786
	MW (Summer Peak)	1.90
3.	Program Cost Effectiveness	
	TRC	1.08
	PAC	1.01

4. Program Descriptors

Market Sector: Non-Residential

Program Classification: Statewide Program Status: New

5. Program Statement

The Low-Income Investment Fund (LIIF), working with the California Department of Education's Child Development Division, the California Head Start Association and Intergy, will be running the California Preschool Energy Efficiency Project (CPEEP). This program will be a cost effective and innovative resource and information program that will bring energy efficiency to preschool centers in Southern California Edison's territory for the first time

CPEEP's primary objectives will be to deliver cost effective energy and demand savings through a comprehensive strategy that includes detailed audits, technical assistance in understanding the recommended technologies and preparing a financial analysis of the identified projects, implementation, and verification. It will also include facility staff workshops to educate preschool owners and managers on new energy efficiency practices and technologies and the development of outreach materials for preschool families and children, to help educate the public about energy efficiency.

LIIF will also work with the preschools to identify and finalize supplemental funding opportunities – including, but not limited to, program budgets, CEC low interest loans, and state funding.

6. Program Rationale

Though K-12 and higher education facilities have been targeted and funded for energy efficiency programs in the past, there is significant identified potential for energy efficiency projects in preschool facilities that have not been addressed because of lack of information and funding. Many of these preschools are housed in older energy intensive facilities that have never implemented energy efficiency retrofits, meaning a significant number of lighting retrofits, sensors, and controls can be anticipated. Additionally, many

older facilities are also located in areas that endure hot summer climates, thus major energy savings will be available in retrofitting HVAC systems.

7. Program Outcomes

The expected outcomes of this program are to increase awareness of energy efficiency among preschool children and families, to train and prepare preschool owners and managers on energy efficiency techniques, and to lay the foundation for energy efficiency practices in the preschool segment in preparation for the potential effects of the Preschool For All Act, which will be voted on in June 2006.

8. Program Strategy

Lack of information, lack of funding, and the absence of targeted programs for the preschool segment are the primary barriers facing the implementation of energy efficiency measures and practices for most preschools within SCE's territory. In order to overcome these barriers, LIIF will use its existing channels, including its association with the California Department of Education and California Head Start Association to increase communication and begin marketing to preschools. Forms of communication include newsletters, email, and direct mail to center directors, a web site, and conferences and professional development meetings to educate this market sector on the benefits of energy efficiency and the program designed to assist them.

In addition, LIIF will work with each preschool on a case-by-case basis to determine the incentive that will make the project feasible for the customer.

9. Program Objectives

LIIF plans to audit 3,000 centers and from them have energy efficiency measures installed in a subset. Projected savings for this program are 3,786,435 kWh and 1,899 kW.

10. Program Implementation

Task 1: Build Tracking System

The CPEEP team has developed a sophisticated database to track the data element requirements for each preschool in the program, which SCE can use to load information into its internal database system.

Task 2: Develop Marketing Materials and Obtain Approval from SCE.

CPEEP will use communication and networking system that exist within the early care and education sector in California. Examples of marketing materials that will be developed include letters from the Department of Education and articles in CHSA newsletters that will explain the program to all state-contracted preschools. Brochures about the program will also be distributed to the preschools and presentations will be made at conferences and seminars.

In addition, age-appropriate information and material will be developed as part of the preschool centers' curriculum for use in the centers to help children understand energy efficiency, as well as to educate their families.

The CPEEP team will work with SCE, Head Start, and the CDE on design and content and develop language-appropriate information about energy efficiency for this new market segment. The CPEEP information and outreach effort will also coordinate the program and materials for this market segment with SCE's Integrated School Based Program

Task 3: Implement Marketing Campaign

Implementation of the marketing campaign will be through the preschool centers' networks and communications channels. All members of the proposal team—LIIF, the Department of Education, and the California Head Start Association, have developed methods of communicating with the centers. Examples include newsletters, professional development conferences and direct mail. Program information will be easily distributed to the centers through these communication links, and centers will be able to enroll online. Materials will then be distributed through the preschools to families and children. Outreach will also be coordinated with the SCE Integrated School Based Program. The table below lists a variety of strategies that will be used to reach the target audience.

Table of marketing activities, and outreach—includes distribution channels:

Materials/actions	#s of	website	email	direct	In	By
	units			mail	person	phone
Program brochures	4,000	X		X		
Program instructions	3,000	X	X		X	X
Program enrollment	2,000	X	X			
Outreach brochures to	100,000	X				
families/ distributed						
through preschool						
centers/English &						
Spanish						
Age-appropriate	100,000					
materials for preschools						

Task 4: Enroll Customers

CPEEP will enroll preschools in the program through an online application and tracking system. Projects will be analyzed and selected based on a tiered system that will take into account potential energy savings, available funding options and related criteria. Selection criteria for projects will be developed that will maximize kWh savings, annual peak demand, and reductions in utility costs.

<u>Task 5: Install Energy Efficient Hardware, Issue Customer Rebates, and/or Perform Program Services</u>

This task will be managed by the program's subcontractor, Intergy, and will include retrofits of T8s, LED exit signs, CFLs, HID retrofits, time clocks and lighting controls,

programmable thermostats, HVAC upgrades and food service measures. Other measures may be retrofitted based on facility needs and requirements.

The program does not assign any specific co-pay percentage for each project, but instead treats each project on a case-by-case basis to determine co-pay amounts. Projects will be based on energy demand and savings and preschool centers budget conditions. The program will also provide technical assistance in understanding the recommended technologies and in preparing a financial analysis of the identified projects. A primary goal will be to move from project identification to installation, including identification and finalization of funding for the projects.

After installation, subcontractors will follow up with post-installation checks and verifications to ensure that all implementation has been completed as per guidelines and will document the actual measures installed. The project completion form will indicate the actual products installed and will note any differences from the original work order. All data from the report will be entered into the program-tracking database; this database will be available to the centers as well as SCE.

Task 6: Inspect Installed Jobs

Within 15-30 days after the subcontractor has completed installation and post-installation verification, a program representative will visit each completed installation site. The representative will have a list of the actual measures installed and will complete a verification report checklist. The representative will also confirm the type and approximate quantity of qualified energy efficient measures installed and will confirm that they are operational. In addition, the representative will visually check for problems such as missing light covers, exposed wiring, hazardous conditions, etc. For programmable thermostats, the representative will ensure that the time clock and programmable settings have been properly adjusted. The verification checklist will be completed and discrepancies noted. All discrepancies will be entered into the program-tracking database, and a corrective action work order will be issued to the subcontractor if necessary.

Task 7: Remedy Installation Issues

Any installation issues that arise from the inspection will be noted in the program database and corrective action will be taken within ten working days. Intergy will reinspect corrected jobs and will complete a verification form.

Task 8: Perform Customer Satisfaction Surveys

Customer satisfaction surveys will be conducted to allow participants to comment on the program and the contractor. Because of the large number of sites, surveys will be conducted either by mail or by telephone. The results of the survey will be entered into the database management tool.

Task 9: Address <u>Customer Satisfaction Issues</u>

Any unsatisfactory issues from the survey will be corrected within ten working days and a follow-up customer satisfaction survey conducted. The results of any revisits will be entered into the database management tool.

Task 10: Perform Program Reporting

Each month, LIIF, with assistance from Intergy, will submit a Program Workbook, Program Narrative, and Flat Files as well as ad hoc reports as required.

Task 11: Program Ramp Down

From the beginning, preschool centers will be notified of the program's timelines and deadlines for scheduling audits and retrofits. Timelines will also be published on the website, including installation deadlines. The CPEEP program will send out a final timeline notification via mail in July 2007 and will begin ramping down by October 2007, requiring all final projects to be underway by November 2007. Final projects will be installed and completed by December 30, 2007.

Task 12: Shut Down Program

Program shut down will be December 30, 2007. Timelines will be communicated to preschools by mail and online.

Task 13: Follow Up with Remaining and New Customer Issues

Any remaining customer issues will be followed up with 30 days of program shut down. Any corrective action needed will be completed immediately. The program website will be open for any remaining customer issues, and the program will be proactive in resolving any potential issues. The program reports will reflect any customer issues.

Task 14: Submit Final Program Report

After program shut down, and all follow up issues have been completed and resolved, CPEEP will submit a final report that reviews the program's progress and accomplishments. The report will respond to the any task issues and detail the program's achievements and challenges. It will review goals and whether they were attained, review the lessons learned, and suggest recommendations for program improvement. Finally, after careful analysis of the program's data, the report will provide a "next step" for the program: either to be mainstreamed, continue in development, or end the program's concept.

11. Customer Description

The CPEEP program targets the non-residential sector, specifically public and private preschool facilities or preschool contractors within SCE's service territory, including stand-alone and shared-space facilities that educate and provide care for pre-kindergarten age children.

12. Customer Interface

Customer interface will include outreach primarily through established communication channels- newsletters, mail and email, and conference presentations. Interested centers can learn more about the program and directly enroll for it through a program website run by LIIF.

13. Energy Measures and Program Activities

13.1. Measures Information & Energy Savings and Demand Reduction Level Data

Measure Name	Gross Unit Annual Electricity Savings (kwh/unit)	User Entered kW Savings per unit (kW/unit)
Lighting-T12 to T8 retrofits (20 2-lamp)	979.2	0.68
Lighting-Dimmable T8/T5 (20 2-lamp)	979.2	0.68
Lighting-CFL retrofits (10)	1275.12	0.39778
Lighting-LED exit signs (1)	351.311	0.04248
Lighting-occupancy sensors-wall (2)	428	0.3524
Lighting-occupancy sensors-ceiling (3)	2367	1.143
HVAC-evaporative cooling systems (1)	2500	1.9
Refrigeration-refrigerator replacements (1)	53	0.00901

13.2 Non-energy Activities (Audits, Trainings, etc.)

Not Applicable

13.3 Subcontractor Activities

Intergy will be serving as the primary subcontractor for the program and will be responsible for completing CPUC filing documents, developing the online application for tracking, M&E Coordination with PG&E, and the installation of measures and technical assistance to centers. Intergy may also employ its own subcontractors if mecessary.

13.4 Quality Assurance and Evaluation Activities

Subcontractors working in the preschool centers will complete the required verification and licensing procedures. Coordination will take place with center directors to minimize disruptions to operations. With oversight by Intergy, subcontractors will be responsible for purchasing and installing all required materials, ensuring that all products meet the program requirements. Customer satisfaction will be emphasized and failure to meet these standards will result in removal of the subcontractor from the program.

13.6 Marketing Activities

Please see Tasks 2 & 3 (Above)